

## List A Noxious Weeds

### African rue

*Peganum harmala*



Herbicide	Rate	Application Timing
Imazapyr* (Arsenal)	0.5-1 qt./acre + 1% v/v methylated seed oil	Apply when plants are actively growing.

Note: \*Imazapyr products are nonselective and will kill any vegetation contacted. Imazapyr is NOT recommended for use in ornamental or turf settings.

### Bohemian/Giant/Japanese knotweed

*Polygonum x bohemicum*, *Polygonum sachalinense*, *Polygonum cuspidatum*



Herbicide	Rate	Application Timing
Glyphosate (Rodeo*, AquaMaster*, AquaNeat* are all safe for aquatic use)	2.5-3% solution (3.2-3.8 oz./gal water) + 0.25% v/v non-ionic surfactant	Apply evenly over leaf surface "to wet," not so dripping occurs. Treat when plants are actively growing, pre-bud to flowering stage: June to July (at least half of foliage should still be green).**
Glyphosate (Rodeo*, AquaMaster*, AquaNeat* are all safe for aquatic use)	5-6 ml undiluted herbicide per individual stem for injections	Use a calibrated injection gun to inject just below the third node from July to September. (gun can be bought online) (total treatment must not exceed 8 quarts 2 gallons per acre or approximately 1,000-1,500 stems per acre for suggested rates).
Triclopyr (Garlon 3A for aquatic sites) OR Imazapyr*** (Habitat* or Arsenal* are all safe for aquatic use)	1% solution (1.3 oz./gal water) + 0.25% v/v non-ionic surfactant	Apply evenly over leaf surface "to wet," not so dripping occurs. Treat when plants are actively growing, pre-bud to flowering stage: June to July.** Injection method is not allowed for these herbicides.

Note: \*These herbicide products are nonselective and will kill any vegetation contacted. \*\*If leaves are above one's head, plants can be bent down to allow better foliar spray coverage. \*\*\*Imazapyr is NOT recommended for use in ornamental or turf settings.

### Camelthorn


*Alhagi maurorum*



Herbicide	Rate	Application Timing
Metsulfuron (Escort XP)	1 oz./acre + 0.25% v/v non-ionic surfactant	Apply during bolting to early flower growth stages.


## Common crupina

### *Crupina vulgaris*

	Herbicide	Rate	Application Timing
	Picloram (Tordon/Picloram 22K - Restricted use pesticide)	1 pint/acre + 0.25% v/v non-ionic surfactant	Apply at rosette growth stage or when adequate soil moisture and plants are actively growing. (Early spring to late summer depending on conditions) DO NOT use near trees, desirable shrubs, water, or high water table.
	Metsulfuron + Chlorsulfuron (Cimarron X-tra)	2 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply at rosette to bolting growth stages. (Early spring to early summer)
	Metsulfuron (Escort XP)	1 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply at rosette to bolting growth stages. (Early spring to early summer)


## Cypress spurge

### *Euphorbia cyparissias*

	Herbicide	Rate	Application Timing
	Quinclorac (Paramount - non-crop)	16 oz. product/acre + 2 pint/acre methyated seed oil	Apply at the flowering stage. (Spring time)
	2,4-D + Dicamba (Range star)	2 qt. 2,4-D/acre (2.0 lb/active ingredient) + 1 qt. dicamba/acre (1 lb active ingredient)	Apply at the flowering stage. (Spring time)


## Dyer's woad


### *Isatis tinctoria*

	Herbicide	Rate	Application Timing
	Metsulfuron (Escort)	0.5-1 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply at the rosette to bloom growth stages. (Late winter to early spring)
	Chlorsulfuron* (Telar)	1 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply at the rosette to early bolt growth stage. (Late winter to early spring)
Note: *This herbicide has residual soil activity that will affect all broadleaf seedlings germinating after application has occurred.			

## Elongated mustard


### *Brassica elongata*

	Herbicide	Rate	Application Timing
	Metsulfuron (Escort XP)	0.5-1 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply at the rosette to bloom growth stages. (Spring to mid-summer)

	Chlorsulfuron* (Telar XP)	1 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply at the rosette to bolting growth stages when plants are actively growing. (Spring to mid-summer)
	Note: *This herbicide has residual soil activity that will affect all broadleaf seedlings germinating after application has occurred.		



## Giant reed

### *Arundo donax*

	Herbicide	Rate	Application Timing
	Glyphosate* (Rodeo, AquaMaster, AquaNeat: all safe for aquatic use)	2-4 qt./acre + 0.25% v/v non-ionic surfactant OR 2% v/v product + 0.25% v/v	Apply foliar application when plants are actively growing (late summer to fall). May require several years of treatment.
	Imazapyr** (Arsenal*, Stalker*, Habitat*)	1-2 qt./acre	Apply to foliage until wet (but not dripping) while plants are actively growing (late summer to fall).
Note: *These herbicide products are nonselective and will kill any vegetation contacted. **Imazapyr is NOT recommended for use in ornamental or turf settings.			


## Giant salvinia

### *Salvinia molesta*

	Herbicide	Rate	Application Timing
	Diquat (Reward - general use)	Refer to label.	Refer to label.
	Glyphosate (Rodeo, Aqua Master, etc. - general use)	Refer to label.	Refer to label.
	Fluridone (Sonar - general use)	Refer to label.	Refer to label.


## Hairy willow-herb

### *Epilobium hirsutum*

	Herbicide	Rate	Application Timing
	Imazapyr* (Habitat**, Arsenal** for aquatic use)	0.5-1% v/v (0.6-1.3 oz. imazapyr/gal water) + 0.25% v/v non-ionic surfactant	Apply evenly over leaf surface "to wet," not dripping. Treat in the pre-bud to flowering stage. (June to August)
	Glyphosate (Rodeo**, AquaMaster**, AquaNeat** for aquatic)	Up to 5% v/v (Up to 6.4 oz. glyphosate/gal)	Apply evenly over leaf surface "to wet," not dripping. Treat in the pre-bud to flowering stage. (June to August; at least half of foliage should still be green)
Note: * Imazapyr is NOT for use in ornamental or turf settings. **These herbicide products are non-selective and will kill any vegetation contacted.			


## Hydrilla

### *Hydrilla verticillata*

	Herbicide	Rate	Application Timing
	Fluridone (Sonar - general use)	Refer to label.	Refer to label.
	Endothall + Diquat (Aquathal K + Reward - general use)	Refer to label.	Refer to label.
	Endothall (Aquathal K - general use)	Refer to label.	Refer to label.


## Meadow knapweed

### *Centaurea nigrescens*

	Herbicide	Rate	Application Timing
	Aminopyralid (Milestone)	7 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply in spring to early summer during bolting to bud growth stages or in fall. Add 1 qt./acre 2,4-D when plants are treated in the bolt to flowering phase.
	Aminocyclopyrachlor + chlorsulfuron (Perspective)	4.75-8 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply from the seedling to the rosette growth stages. IMPORTANT: Applications greater than 5.5 oz. product/acre exceeds the threshold for selectivity. DO NOT treat in the root zone of desirable trees and shrubs. Not permitted for use in the San Luis Valley.
	Picloram (Tordon/Picloram 22K - Restricted use pesticide)	1 qt. product/acre + 0.25% v/v non-ionic surfactant	Apply in spring to early summer during bolting to bud growth stages or in fall. Add 1 qt./acre 2,4-D when plants are treated in the bolt to flowering phase. DO NOT use near trees, desirable shrubs, water, or high water table.


## Mediterranean sage

### *Salvia aethiopsis*

	Herbicide	Rate	Application Timing
	Aminopyralid (Milestone)	7 oz. product/acre + 1% v/v methylated seed oil	Apply in spring during rosette to bolting (early flowering) growth stages.
	Metsulfuron (Escort or Cimarron) + 2,4-D	1 oz. product/acre (metsulfuron) + 1 qt./acre (2,4-D) + 0.25% v/v non-ionic surfactant	Apply in spring during rosette to bolting (early flowering) growth stages.
	Picloram (Tordon/Picloram 22K - Restricted use pesticide) + Chlorsulfuron (Telar)	1 qt. product/acre (Tordon) + 1 oz. product/ acre (Telar) + 0.25% v/v non-ionic surfactant	Apply in spring during rosette to bolting (early flowering) growth stages. DO NOT use near trees, desirable shrubs, water, or high water table.


## Medusahead

*Taeniatherum caput-medusae*

	Herbicide	Rate	Application Timing
	Sulfometuron + Metsulfuron (Oust Extra)	3 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply in fall either preemergence or very early postemergence


## Myrtle spurge

*Euphorbia myrsinites*

	Herbicide	Rate	Application Timing
	2,4-D ester	2 qt./acre + 1% v/v methylated seed oil	Use a 2,4-D ester formulation that has a 4.0 lbs. active ingredient/acre. Apply during spring or during fall regrowth.
	Dicamba + 2,4-D	1 pint/acre dicamba + 2-3 pints/acre 2,4- D (amine or ester)	Use a 2,4-D formulation that has a 4 lbs. active ingredient/gallon. Apply during spring or during fall regrowth.
	Picloram (Tordon/Picloram 22K - Restricted use pesticide) + 2,4-D	20 oz./acre + 2-3 pints/acre 2,4-D (amine or ester)	Apply at flowering growth stage during spring or to fall regrowth. DO NOT use near trees, desirable shrubs, water, or high water table.


## Orange hawkweed

*Hieracium aurantiacum*

	Herbicide	Rate	Application Timing
	Aminopyralid (Milestone)	6-7 oz. product/acre + 0.25% v/v non- ionic surfactant	Apply when plants are in rosette to bolting stage. (Spring to early summer)*
	Clopyralid (Transline)	1.33 pint product/acre + 0.25% v/v non-ionic surfactant	Apply when plants are in the rosette growth stage. (Spring to early summer)*
	Clopyralid + 2,4-D (Curtail)	2 qt. product/acre + 0.25% v/v non-ionic surfactant	Apply when plants are in the rosette growth stage. (Spring to early summer)*
Note: *Ideally treat in the reproductive stage, which is bolting to flowering. Fall treatments are ineffective.			

## Purple loosestrife


*Lythrum salicaria*

	Herbicide	Rate	Application Timing
	Triclopyr (Garlon 3A)	6-8 qt./acre OR 1.3- 1.9 oz./gal water + 0.25% v/v non-ionic surfactant	Apply in summer. If plants are flowering, cut and properly dispose of flowerheads before applying Garlon 3A.

	Glyphosate (Rodeo*, Habitat* - aquatic safe)	4 qt./acre OR 1.3-1.9 oz./gal water + 0.25% v/v non-ionic surfactant	Apply in summer during the flowering stage. Cut and properly dispose of flowerheads before applying Rodeo.
	Aquatic 2,4-D Amine	1-2 qt./acre or 1.3-2.5 oz./gal water + 0.25% v/v non-ionic surfactant	Early spring - prevents seed formation only. Retreatment will be necessary. DO NOT apply when outside temperatures will exceed 85 degrees.
Note: *These herbicide products are nonselective and will kill any vegetation contacted.			


## Rush skeletonweed

### *Chondrilla juncea*

	Herbicide	Rate	Application Timing
	Aminopyralid (Milestone)	5-7 oz./acre (start with 7 oz.) + 0.25% v/v non-ionic surfactant	Apply at rosette growth stage. (Spring to Early Summer)
	Aminocyclopyrachlor + chlorsulfuron (Perspective)	4.75-8 oz. product/acre + 0.25% v/v non-ionic surfactant	Post-emergence in spring until flowering, or to fall rosettes. IMPORTANT: Applications greater than 5.5 oz. product/acre exceeds the threshold for selectivity. DO NOT treat in the root zone of desirable trees and shrubs. Not permitted for use in the San Luis Valley.
	Picloram (Tordon/Picloram 22K - Restricted use pesticide)	2-4 pint/acre (start with 4 pints) + 0.25% v/v non-ionic surfactant	Apply at rosette growth stage. (Spring to Early Summer) DO NOT use near trees, desirable shrubs, water, or high water table.


## Squarrose knapweed

### *Centaurea virgata*

	Herbicide	Rate	Application Timing
	Aminopyralid (Milestone)	7 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply in spring to early summer during bolting to bud growth stages or in fall. Add 1 qt./acre 2,4-D when plants are treated in the bolt to flowering phase.
	Aminocyclopyrachlor + chlorsulfuron (Perspective)	4.75-8 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply from the seedling to the rosette growth stages. IMPORTANT: Applications greater than 5.5 oz. product/acre exceeds the threshold for selectivity. DO NOT treat in the root zone of desirable trees and shrubs. Not permitted for use in the San Luis Valley.
	Picloram (Tordon/Picloram 22K - Restricted use pesticide)	1 qt. product/acre + 0.25% v/v non-ionic surfactant	Apply in spring to early summer during bolting to bud growth stages or in fall. Add 1 qt./acre 2,4-D when plants are treated in the bolt to flowering phase. DO NOT use near trees, desirable shrubs, water, or high water table.


## Tansy ragwort

*Senecio jacobaea*

	Herbicide	Rate	Application Timing
	Aminopyralid (Milestone)	4 to 5 fl oz./acre	Apply at the rosette growth stage. (During first year of growth or Spring)
	Picloram (Tordon/Picloram 22K - Restricted use pesticide)	2 to 4 pint/acre + 0.25% v/v non-ionic surfactant	Apply at the rosette growth stage. (During first year of growth or Spring) DO NOT use near trees, desirable shrubs, water, or high water table.
	Metsulfuron (Escort XP)	1 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply at the bud growth stage. (Spring)
	2,4-D	2 lb ai/acre + 0.25% v/v non-ionic surfactant	Apply at the rosette growth stage. (During first year of growth or Spring)

## Yellow starthistle

*Centaurea solstitialis*

	Herbicide	Rate	Application Timing
	Aminopyralid (Milestone)	7 oz. product/acre	Apply during rosette growth and bolting growth stages. (Early spring to early summer)
	Aminocyclopyrachlor + chlorsulfuron (Perspective)	3-5 oz. product/acre + 0.25% v/v non-ionic surfactant	Apply during rosette growth and bolting growth stage; most effective at the seedling to the rosette stages. IMPORTANT: Applications greater than 5.5 oz. product/acre exceeds the threshold for selectivity. DO NOT treat in the root zone of desirable trees and shrubs. Not permitted for use in the San Luis Valley.
	Clopyralid (Transline)	1.33 pints product/acre	Apply during rosette growth and bolting growth stages. (Early spring to early summer)
	Picloram (Tordon/Picloram 22K - Restricted use pesticide)	1.5-2 pints product/acre	Apply during rosette growth stage or when adequate moisture is available, and plants are actively growing. (Early spring to late summer depending on conditions.) DO NOT use near trees, desirable shrubs, water, or high water table.